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PRELIMINARY RECONNAISSANCE

<u>of</u>

A.P. 1193.

PORT KEATS DISTRICT. N. T.

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Locality Plan showing A.P. boundary and ground traverses.

Scale

l" = 4 mile3.

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PRELIMINARY RECONNAISSANCE OF A.P. 1193. PORT KEATS DISTRICT N.T.

Introduction.

In October 1964 a ground reconnaissance was carried out over the more accessible areas of A.P. 1193. This A.P. covers about 3,000 square miles of coastal plains in the Port Keats District with the northern boundary at Anson Bay and the southern boundary abutting the Keyling Inlet. The purpose of this survey was to check the more attractive areas for the presence of bauxite laterites, manganese, black sands and other minerals. Owing to lack of time only the country south of the Moyle River was examined.

Access

Access to Port Keats is gained by means of about 136 miles of rough bush road with the starting point at the Daly River Police Station. During our visit some country east of Turners Crossing was flooded and progress was most difficult. Road access to Port Keats Mission during the wet season is not possible.

Previous Work.

Records of previous mining actilities carried in the Port Keats District are scarce. At the time of our inspection, a French geophysical exploration company conducted a seismic survey over the country surrounding Port Keats.

Geology

General Observations.

Most of the area is still unmapped and therefore geological maps are not available. Owing to this lack of basic information the determination of stratigraphic sequences is uncertain. On our traverse from the Daly River to Port Keats the following rock types were noted

Daly River to Elizabeth Downs Turn Off.

Sandy flats with occasional quertz outcrops.

Elizabeth Turn Off to Hermit Hill.

Lower Proterozoic garnetifercus granite and grano-diorite:

Hermit Hill to Moyle River.

Low lying swampy country.

Moyle River to Anopheles Creek.

Volcanics in the valley floor flanked in the south by high sandstone cliffs of Mullaman sandstone. This prominent scarp line suggests strong east-west faulting.

Anopheles Creek to Mt. Goodwin.

Black soil plains with scattered sandstone outcrops on the northern boundary. Mullaman? This sandstone shows weak laterite development.

Mt. Goodwin to Port Keats.

Mainly Mullaman sandstone covered by residual sand. Large areas of this sandstone are capped by ferruginous laterite up to 10 ft. thick.

Table Hill.

This prominent flat top is located about 24 miles south-east from Port Keats and rises 650 ft. above the black soil plains. A cross section from base to the summit gives the following:-

Base to 600 ft. Mullaman sandstone.

600 ft. to 650 ft. Porcellanite.

Laterite development on the flat top is almost non-existent.

Beaches and Hinterland. Tree Point - Tchindi - Providence Hill - Fossil Summit.

The hinterland and beaches at these localities were checked for manganese, buarite laterite and black sands. reconnaissance failed to show up these minerals. However, the extensive sand dunes at Tchindi beach contain minor concentrations of pisolitic magnetite. Most of the coast line is flanked by high cliffs of Mullaman sandstone with interbedded lenses of shale and porcellanite.

Conclusions and Recommendations.

Our inspection of the areas south of the Moyle River failed to uncover bauxite, manganese or heach sands of economic value. I recommend that this section of A.P. 1193 be reduced in size. South of the Moyle River only the favourable area near the Macadam Range should be retained.

> - Lower E. Larsen.

